

LISTING OF CLAIMS

Claim 1 (Currently Amended): A titanyl phthalocyanine crystal formed by crystallizing a titanyl phthalocyanine compound, characterized in that the crystal has a maximum peak at a Bragg angle $2\theta \pm 0.2^\circ = 27.2^\circ$, has no peak at 7.4° in a CuK α characteristic X-ray diffraction spectrum, and the crystal does not have a peak of a change in ~~peak at a~~ temperature within the range from 50 to 400°C. except for a peak associated with evaporation of adsorbed water in differential scanning calorimetry, and the crystal recovered after dipping in an organic solvent for 7 days has a maximum peak at a Bragg angle $2\theta \pm 0.2^\circ = 27.2^\circ$ and has no peak at 7.4° in a CuK α characteristic X-ray diffraction spectrum.

Claim 2 (Original): The titanyl phthalocyanine crystal according to claim 1, which has no peak at a Bragg angle $2\theta \pm 0.2^\circ = 26.2^\circ$ in a CuK α characteristic X-ray diffraction spectrum.

Claim 3 (Original): The titanyl phthalocyanine crystal according to claim 1, which is formed from a titanyl phthalocyanine compound represented by the formula (1):

wherein X^1 , X^2 , X^3 and X^4 are the same or different and each represents a halogen atom, an alkyl group, an alkoxy group, a cyano group, or a nitro group, and a, b, c and d are the same

or different and each represents an integer of 0 to 4.

Claim 4 (Cancelled)

Claim 5 (Currently Amended): The titanyl phthalocyanine crystal according to claim 1, wherein a crystal recovered after dipping does not have a ~~change in peak~~ of a change in at a temperature within the range from 50 to 400°C except for a peak associated with evaporation of adsorbed water in differential scanning calorimetry.

Claim 6 (Previously Presented): The titanyl phthalocyanine crystal according to claim 1, wherein a crystal recovered after dipping has no peak at a Bragg angle $2\theta \pm 0.2^\circ = 27.2^\circ$ in a CuK α characteristic X-ray diffraction spectrum.

Claim 7 (Previously Presented): The titanyl phthalocyanine crystal according to claim 1, wherein the organic solvent is at least one selected from the group consisting of tetrahydrofuran, dichloromethane, toluene and 1,4-dioxane.

Claim 8 (Original): A method of producing the titanyl phthalocyanine crystal of claim 1, which comprises the following steps:

a pigmentation pretreatment step of adding a titanyl phthalocyanine compound in an aqueous organic solvent, stirring under heating for a fixed time, and allowing the resulting solution to stand for a fixed time under the conditions at a temperature lower than that of the above stirring process, thereby to stabilize the solution;

a recrystallization step of removing the aqueous organic solvent from the solution to obtain a crude crystal of the titanyl phthalocyanine, dissolving the crude crystal of the titanyl phthalocyanine in a solvent, adding dropwise the solution in a poor solvent to recrystallize the titanyl phthalocyanine compound, and then subjecting the recrystallized compound; and

a pigmentation step of dispersing the low crystalline titanyl phthalocyanine compound obtained by recrystallization in an organic solvent in the presence of water, and stirring the solution at 30 to 100°C. for 5 to 60 hours.

Claim 9 (Original): A method of producing the titanyl phthalocyanine crystal of claim 1, which comprises the following steps:

a pigmentation pretreatment step of adding a titanyl phthalocyanine compound in an aqueous organic solvent, stirring under heating for a fixed time, and allowing the resulting solution to stand for a fixed time under the conditions at a temperature lower than that of the above stirring process, thereby to stabilize the solution;

a step of removing the aqueous organic solvent from the solution to obtain a crude crystal of the titanyl phthalocyanine, and treating the crude crystal of the titanyl phthalocyanine according to acid-paste method; and

a pigmentation step of dispersing the treated low crystalline titanyl phthalocyanine compound in an organic solvent in the presence of water, and stirring the solution at 30 to 100°C. for 5 to 60 hours.

Claim 10 (Original): An electrophotosensitive material comprising a conductive substrate and a photosensitive layer formed on the substrate, the photosensitive layer containing the titanyl phthalocyanine crystal of claim 1 as an electric charge generating material.

Claim 11 (Original): The electrophotosensitive material according to claim 10, wherein the photosensitive layer is a single-layer type photosensitive layer containing the titanyl phthalocyanine crystal, at least one of a hole transferring material and an electron transferring material, and a binding resin in the same layer.

Claim 12 (Original): The electrophotosensitive material according to claim 10, wherein the photosensitive layer is a multi-layer type photosensitive layer comprising at least two layers

among an electric charge generating layer containing the titanyl phthalocyanine crystal, an electric charge transferring layer containing at least one of a hole transferring material and an electron transferring material, and a photoconductive layer containing the titanyl phthalocyanine crystal and at least one of a hole transferring material and an electron transferring material, which are mutually laminated.

Claim 13 (Previously Presented): A method according to claim 8, wherein in the pigmentation step, the solution is stirred at a temperature of from 50°C to 100°C for 5 to 60 hours.

Claim 14 (Previously Presented): A method according to claim 9, wherein in the pigmentation step, the solution is stirred at a temperature of from 50°C to 100°C for 5 to 60 hours.